WILDLIFE

PLANNING RESOURCE MANAGEMENT SYSTEMS

Successful resource management systems (RMS) for wildlife requires the correct application of a combination of practices that will (1) meet the quality criteria for all resource concerns (SWAPA) (2) satisfy objectives of clients and (3) protect ecosystems upon which endangered or threatened species depend.

Texas provides habitat for more than 1100 species of vertebrate wildlife, including fish, and more than 5000 species of vascular plants. All land uses identified in Section III of the Field Office Technical Guide (FOTG) provide habitat for this broad diversity of plant and animal life.

White-tailed deer, the most popular game species in Texas, occupies all land uses listed in Section III. Other popular game species include mourning and white-winged doves, bobwhite and scaled quails, Rio Grande and eastern wild turkeys, pheasant, ducks, geese, javelina, gray and fox squirrels, mule deer, and pronghorn.

Many clients request planning assistance for aquaculture facilities or recreational fishing in private ponds and lakes. Channel and blue catfish, largemouth bass, hybrid striped bass, sunfish, minnows, red drum, tilapia, and marine shrimp are all produced in aquaculture facilities in Texas, while catfish, largemouth bass, sunfish, and minnows are commonly stocked and managed in the state's estimated one million private impoundments.

Further, 88 species of plants and animals in Texas are currently listed as endangered or threatened by the U.S. Fish and Wildlife Service with more species to be listed. Texas Parks and Wildlife Department list 168 endangered and threatened species. RMS's must be planned on all land uses that will conserve the habitats of these species. RMS's planned and applied to benefit these species can contribute to their eventual delisting.

Most species of plants and animals in Texas are neither managed for recreational or commercial purposes. A relative small percentage are game, endangered or threatened. The remaining species should also be considered when planning and applying RMS's.

When planning a wildlife RMS, use RMS guides developed for the appropriate major land use in addition to guidance for wildlife. For instance, when planning for white-tailed deer on rangeland, the planner must use RMS's for both rangeland and wildlife (rangeland). Planning for white-tailed deer in forestland will require the forestland RMS in addition to the wildlife (forestland) RMS.

Since wetlands are found within each major land use, RMS's for the appropriate land use in addition to the wildlife (wetland) RMS should be used. For example, when planning for surface-feeding (dabbling) ducks in bottomland hardwoods, use forestland and wildlife (wetland) RMS's.

When planning for surface-feeding ducks in coastal prairie wetlands, use RMS's for rangeland and wildlife (wetland). When planning for surface-feeding ducks in rice fields, use cropland and wildlife (wetland) RMS's.

RMS's for fisheries and aquaculture stand alone. The wildlife (fisheries) RMS is used when planning noncommercial or recreational fisheries, while the wildlife (aquaculture) RMS is used for commercial operations.

RMS's for wildlife included in Section III:

1. Rangeland
2. Cropland
3. Forestland
4. Recreational Fisheries
5. Aquaculture
6. Wetland

RMS's for wildlife include a combination of practices that are:

1. ESSENTIAL – These practices are essential to provide habitat (food, cover, water, and space in proper arrangement) for the desired species.

2. NEEDED – These practices are needed in support of essential practices to manage and protect the total ecosystem, particularly endangered and threatened species.

3. DESIRABLE – These practices enhance essential and needed practices to accomplish land users' objectives.

The following is a list of practices applicable to wildlife.

Essential Practices

Commercial Fishponds **or** Fish Raceway or Tank (aquaculture RMS)
Pond & Fishpond Management (recreational fisheries RMS's)
Prescribed Grazing (when livestock are present)
Upland Wildlife Habitat Management (cropland, rangeland, and forestland RMS's)
Wetland Wildlife Habitat Management (wetland RMS within cropland, rangeland or forestland RMS's))

Needed Practices

Brush Management (rangeland, forestland, wetland RMS)
Conservation Cover (cropland, rangeland, forestland, wetland RMS's)
Dike (wetland RMS)
Prescribed Burning (rangeland, forestland, wetland RMS's)
Range Planting (rangeland, wetland RMS's)
Restoration and Management of Declining Habitats (all RMS's except aquaculture)
Tree/Shrub Establishment (rangeland, forestland, wetland RMS's)
Wildlife Watering Facility (rangeland RMS receiving less than 25 inches average annual rainfall)

Desirable Practices

Early Successional Habitat Development/Management
Fence
Filter Strip
Pest Management
Pipeline
Riparian Forest Buffer
Riparian Herbaceous Cover
Shallow Water Management for Wildlife
Stream Habitat Improvement and Management
Structure for Water Control
Well
Wetland Creation
Wetland Enhancement
Wetland Restoration
Windbreak/Shelterbelt Establishment
Windbreak/Shelterbelt Renovation

Attached guidance documents illustrate the process of developing the 6 RMS's options for Wildlife. They are designed to assist the planner:

(1) identify the common species likely to be encountered on the land use
(2) select species desired by the client
(3) select a combination of conservation practices that will meet the quality criteria for all resource concerns (SWAPA), accomplish the client's objective(s) and/or protect endangered and threatened species habitats.

All of the conservation practices listed for a land use will have a positive effect, dependent upon the species and the skill of the individual developing the site-specific RMS. For instance, brush management is often a needed practice to provide optimal habitat for white-tailed deer on rangeland. Where habitat for the endangered black-capped vireo has been identified, brush management for white-tailed deer habitat enhancement may need modification to protect habitat of the bird. Individual skills in preparing RMS's for wildlife will depend upon training from NRCS specialists, resource materials available in field offices, and experience and motivation of the individual.